

REMARKS

Claims 1-3 and 5-9 remain pending after amendment.

Claim Amendments

Claims 1 and 9 are amended to state that the sheet is heat treated at or above a temperature at which thermal shrinkage of the fibers constituting the second layer is initiated, whereby the second layer shrinks to form protrusions in the first layer. Support for this amendment resides at page 11, lines 21-25 of the specification. New claim 10 is added, for which support resides at page 9, lines 25-29 as well as page 10, lines 16-21. No new matter is added by this amendment.

Rejection of Claims 1-3, 5 and 8-9 under 35 USC 102(b)

Claims 1-3, 5 and 8-9 stand rejected under 35 USC 103(a) as being unpatentable over Vander Wielen U.S. Patent No. 4,720,415 in view of Schleinz et al U.S. Patent No. 5,612,118.

This rejection respectfully is traversed to the extent deemed to apply to the claims as amended.

In applicants' claimed invention, as now defined by amended claim 1, the bulky sheet material is comprised of first and

second layers partly joined together, with the first layer having a number of protrusions, with the second layer comprising a fiber aggregate comprising fibers which are made of a thermoplastic polymer and exhibit thermal shrinkability and elastomeric behavior, and said first layer comprising a fiber aggregate which comprises fibers which are made of a thermoplastic polymer and which have substantially no thermal shrinkability or do not shrink at or below the thermal shrinkage temperature of the fibers exhibiting thermal shrinkability,

the sheet having been heat-treated at or above a temperature at which thermal shrinkage of the fibers constituting the second layer is initiated, whereby the second layer shrinks to form said protrusions in said first layer.

Applicants' sheet material is formed by superimposing the first and second layers of fiber aggregate and subjecting the superimposed layers to heat treatment, whereby the elastomeric fiber aggregate of the second layer shrinks, while the fiber aggregate of the first layer does not - thus forming the protrusions in the first layer due to the contraction (shrinkage) of the elastomeric second layer.

By contrast, the sheet material of Vander Wielen is formed by *elongating* an elastic web while bonding the *elongated* web to

an adjacent gatherable layer. The elongated elastic web is then permitted to become relaxed at which time the gatherable layer becomes gathered at spaced apart locations. It is not the intent of the reference that the elastic web be heat shrinkable while retaining its elasticity as required by applicants' amended claim 1, whereby "gathered portions" are formed in the adjacent non-heat shrinkable layer *upon shrinkage of the heat shrinkable layer.*

Schleinz is cited to teach that a joined layer can be gathered by elastic fibers that are heat shrunk, citing column 8, lines 1-10. The Examiner accordingly takes the view that it would have been obvious to use heat shrinkable fibers to gather the web of Vander Wielen.

The deficiencies of Vander Wielen are discussed at length above. Such deficiencies are not cured by the Examiner's citation of Schleinz.

As argued previously, the elastic layer 52 of Schleinz is not a "fiber aggregate" as required in applicants' claims – the reference instead teaches that the layer 52 is comprised of "any suitable elastic material, and can be in the form of a flat sheet or layer of elastic material or a plurality of strands,

ropes or the like, of elastic material." See column 4, lines 36-40 of the reference.

The Examiner's combination of the cited references must fail for several reasons. First, Schleinz does not teach the use of a fiber aggregate as the elastic layer. Secondly, no motivation or suggestion resides in either of the references to replace the elastic layer of Vander Wielen with the heat shrinkable layer 52 of Schleinz. Indeed, the modification of Vander Wielen in the manner suggested by the Examiner would result in a sheet material of diminished permeability in contrast to that achieved by applicants' invention.

Method claim 8 is directed to the formation of the first layer by carding, which results in the formation of "filled protrusions" as depicted in applicants' Figure 2. Such an embodiment is neither disclosed nor suggested by the cited references.

Claim 9 is similarly distinguishable over the combination of references. New claim 10 is directed to an embodiment wherein the first and second layers are comprised of one of a carded web, a nonwoven fabric, or a knitted fabric. The embodiment of claim 10 is clearly distinguishable over the

teachings of Schleinz, which is silent with respect to the use of such fiber aggregates.

In view of the above, the rejection is without basis and should be withdrawn.

Rejection of Claims 6-7 under 35 USC 103(a)

Claims 6 and 7 stand rejected as being unpatentable under 35 USC 103(a) as being unpatentable over Vander Wielen in view of Schleinz and Zelazoski et al. This rejection respectfully is traversed to the extent deemed to apply to the claims as amended.

The deficiencies of both the Vander Wielen and Schleinz references are discussed above. The additional citation of Zelazoski et al does not overcome such deficiencies. Indeed, the mere application of Zelazoski to teach the presence of "perforations" does nothing to address the inadequacies of the primary references.

The rejection is thus without basis and should be withdrawn.

The application is now believed to be in condition for allowance and an early indication of same is earnestly solicited.

In the event that any outstanding matters remain in this application, Applicants request that the Examiner contact James W. Hellwege (Reg. No. 28,808) at (703) 205-8000 to discuss such matters.

Applicant respectfully petitions under the provisions of 37 CFR 1.136(a) and 1.17 for a three-month extension of time in which to respond to the Examiner's Official Action. The Extension of Time fee in the amount of \$930.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Very truly yours,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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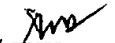

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